## **ABSTRACT**

The present invention relates to the diagnosis and monitoring of diseases and conditions by quantifying markers, including degradation products of disease-associated proteins, such as diketopiperazines composed of the two N-terminal amino acids or the two C-terminal amino acids of such proteins. The methods are useful for diagnosing or monitoring various diseases, including multiple sclerosis, Alzheimer's disease and ischemia. The invention further provides binding partners specific for the markers and compositions and kits for conducting the methods of the invention.